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STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
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STAFF SUBMITTAL

for the meeting of the
COMMISSION ON WATER RESOURCE MANAGEMENT

December 21, 2011
Honolulu, Oahu

Roman Catholic Church in the State of Hawaii
APPLICATION FOR A WATER USE PERMIT
SSDC 1 Well (Well No. 2146-01 – correct Well No. is 2146-04), TMK (1) 4-2-011:004, WUP No. 936
Future (Municipal) Use for 0.010 mgd
Waimanalo Ground Water Management Area, Oahu

APPLICANT:

Roman Catholic Church in the State of Hawaii
1184 Bishop Street
Honolulu, HI 96813

LANDOWNER:

Same

SUMMARY OF REQUEST:

The applicant requests that the Commission on Water Resource Management (Commission) approve a water use permit for an allocation of 0.010 million gallons per day (mgd) of potable dike confined ground water from a proposed well to supply the potable water needs of the St. Stephens Diocesan Center.

LOCATION MAP: See Exhibit 1

BACKGROUND:

On September 22, 2011, a completed water use permit application was received from Roman Catholic Church in the State of Hawaii by the Commission. Additional information regarding the source, use, notification, objections, and field investigation(s) is provided in Attachment A.

ANALYSIS/ISSUES:

Section 174C-49(a) of the State Water Code establishes seven (7) criteria that must be met to obtain a water use permit. An analysis of the proposed permit in relation to these criteria follows:

(1) Water availability

Through the Hawaii Water Plan, Water Resource Protection Plan (WRPP), the Commission has adopted 10 mgd as the sustainable yield for the **Waimanalo** Aquifer System Area. Individual existing water use permits in this aquifer system area are shown in Exhibit 2. Normally, high-level dike-confined water use permits do not count against sustainable yield and are instead accounted for in Instream Flow Standards. However, the Waimanalo Aquifer System Area does not have extensive basal groundwater (as noted in the WRPP as predominantly high-level) and streamflows. Therefore, all water use permits have been counted against sustainable yield in the Waimanalo Aquifer System Area. Sea Life Park and Oceanic Institute are allocated a total of 14.112 mgd for salt water, which does not count against sustainable yield. Though near the ocean, some of the wells are slightly less than the salt water concentration definition of 17,000 mg/l as specified in the WRPP and Hawaii Well Construction and Pump Installation Standards. Staff will be reviewing if these highly brackish sources should have some portion counted against the sustainable yield. A summary of the current ground water conditions in the aquifer is provided in Table 1:

Table 1. Waimanalo Aquifer System Area

<u>ITEM</u>	Waimanalo Aquifer System Area (mgd)
Sustainable Yield (basal ground water)	10
Less: Other Existing Water Use Permits (both basal and dike)	1.734
Reservation to DHHL (basal)	0.124
Subtotal (Current Available Allocation)	8.142
Less: Other Completed Applications	none
Less: This Application	0.010
Subtotal (Potential Available Allocation)	8.132

Therefore, there is adequate groundwater available to accommodate the requested quantity. However, as this is a dike area with Maunawili Stream downgradient, this source may affect Instream Flow Standards. Pump test should provide evidence of any possible impacts.

(2) Reasonable-beneficial

Section 174C-3 HRS defines "reasonable-beneficial use" is

"...the use of water in such a quantity as is necessary for economic and efficient utilization, for a purpose, and in a manner which is both reasonable and consistent with the state and county land use plans and the public interest".

I. Purpose of Use

The applicant is requesting the use of fresh, potable ground water to supply both domestic and municipal demands. The Declaration of Policy section, §174C-2(c) HRS, states that the Water Code shall be liberally interpreted to obtain maximum beneficial use of the waters of the State for various purposes including domestic and municipal uses.

II. Quantity Justification

The applicant is requesting a total of 0.010 mgd for various domestic and municipal type uses. The buildings and average number of users include:

- Cullinan Diocesan Office Building - 30
- Dormitory - Average Around 50 to 70, mostly on weekends (less during the week)
- Castle Building - 2
- Monastery - 5
- Cottage #1 - 3
- Cottage #2 - 2
- Guest Cottage – 1

The total acreage of the site is 20.92 acres. According to the real estate listing, there is a total of 96,800 square feet of building area. Table 15 of the Water System Standards of the State of Hawaii's Departments of Water Supply estimates that for a commercial / residential mix, water use may be estimated at 120 gallons per 1,000 square feet on Oahu, which amounts to 96,800 sq. feet x 120 gallons/1,000 square feet = 11,616 gallons per day, or 0.012 mgd. Therefore, the applicant's request is very close to the quantities that the Water System Standards indicate.

III. Efficiency of Use

The applicant states that its operations are as water efficient as possible because they are using basic water conservation measures such as leak tracing, etc.

IV. Analysis of Practical Alternatives

The applicant has identified discussed several alternatives to the proposed use of potable ground water. An analysis of each of the alternatives is as follows:

1. Municipal sources – connection to the BWS system is too costly (note that the BWS has not submitted any objections to this application)
2. Wastewater reuse – not appropriate for drinking water needs
3. Ditch system – none nearby
4. Desalinization – no nearby source
5. Surface water – none nearby

(3) Interference with other existing legal uses

There are 3 other wells currently in use within 1 mile of this source (refer to Exhibit 1). Two of the wells have been abandoned and sealed. The third well is a tunnel source that is currently unused. Pump tests done as a requirement of the well construction and pump installation permits will show any adverse effects of pumpage.

(4) Public interest

Public interest is defined under §174C-2 - Declaration of policy, as follows:

“(c) The state water code shall be liberally interpreted to obtain maximum beneficial use of the waters of the State for purposes such as domestic uses, aquaculture uses, irrigation and other agricultural uses, power development, and commercial and industrial uses. However, adequate provision shall be made for the protection of traditional and customary Hawaiian rights, the protection and procreation of fish and wildlife, the maintenance of proper ecological balance and scenic beauty, and the preservation and enhancement of waters of the State for municipal uses, public recreation, public water supply, agriculture, and navigation. Such objectives are declared to be in the public interest.”

There have been no objections to this application at the time of the preparation of this submittal.

Therefore, this application meets the public interest criteria.

(5) State & county general plans and land use designations

The proposed uses are in the State Ag District, and the county zoning is Ag-1.

Normal agency review includes:

- 1) the State's Department of Land and Natural Resources (DLNR) and its State Parks, Aquatic Resources, Historic Preservation, and Land Divisions; the Department of Health (DOH) with its Clean Water, Safe Drinking Water, and Wastewater Branches; the Department of Hawaiian Home Lands (DDHL), and Land Use Commission (LUC); and the Office of Hawaiian Affairs (OHA).
- 2) the Office of the Mayor, Department of Planning and Permitting, and the Board of Water Supply;

No comments or objections have been made through this review. These proposed uses are consistent with the state and county general plans and land use designations.

Therefore, this application meets the criteria for compliance with state & county general plans and land use designations.

(6) County land use plans and policies

Again normal County review includes Office of the Mayor, Department of Planning and Permitting, and the Board of Water Supply. No comments or objections have been made.

Therefore, this application meets the criteria for compliance with county land use plans and policies.

(7) Interference with Hawaiian home lands rights

All permits are subject to the prior rights of Hawaiian home lands. The Department of Hawaiian Home Lands (DHHL) and the Office of Hawaiian Affairs have reviewed this application and made no objections. Further, standard water use permit conditions 3.g., 6., and 9.f. notify all water use permittees that their permits are subject to and cannot interfere with Hawaiian home land rights.

Even with the DHHL reservation, there is sufficient water to accommodate the requested amount. Therefore, this application will not interfere with Hawaiian home lands rights.

(8) Other issues

1. Chapter 343 – Environmental Assessment (EA) Compliance

EA Triggers

In accordance with §HRS 343-5(a), the applicant's proposed action does not trigger the need for an EA.

RECOMMENDATION:

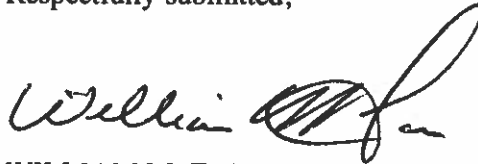
Staff recommends that the Commission approve the issuance of water use permit no. 936 to Roman Catholic Church in the State of Hawaii for the reasonable and beneficial use of 0.010 million gallons per day of dike-confined water for municipal use from the proposed SSDC 1 Well (Well No. 2146-01), subject to the standard water use permit conditions listed in Attachment B and the following special condition:

1. In the event that the tax map key at the location of the water use is changed, the permittee shall notify the Commission in writing of the tax map key change within thirty (30) days after the permittee receives notice of the tax map key change.

December 21, 2011

2. Should pump tests indicate that a recharge boundary is encountered, then a petition to amend Instream Flow Standards for Maunawili Stream shall be submitted.

Respectfully submitted,



WILLIAM M. TAM
Deputy Director

Attachment(s): A (Water Use Permit Detailed Information)
 B (Water Use Permit Standard Conditions)

Exhibit(s): 1 (Location Map)
 2 (Existing Water Use Permits and 12-MAVs)

APPROVED FOR SUBMITTAL:



WILLIAM J. AILA, JR.
Chairperson

WATER USE PERMIT DETAILED INFORMATION

Source Information

AQUIFER:

Waimanalo System, Windward Sector, Oahu

Sustainable Yield:	10 mgd
Existing Water Use Permits:	1.734 mgd
DHHL reservation:	0.124 mgd
Available Allocation:	8.142 mgd
Total other pending applications:	0 mgd
This application:	0.010 mgd

WELL:

SSDC 1 Well (Well No. 2146-01)

Location: 6301 Pali Highway, Oahu, TMK: (1) 4-2-011:004

Year Drilled: proposed

Casing Diameter: 6 in.

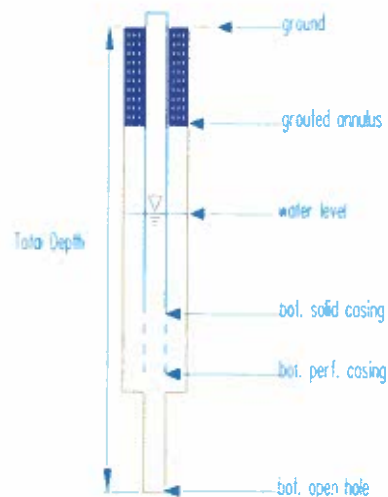
Elevations (msl = 0 ft.) (all numbers are proposed since well has not yet been drilled)

Water Level:	200 ft.
Ground:	470 ft.
Bottom of Solid Casing:	120 ft.
Bottom of Perforated:	20 ft.
Bottom of Open Hole:	0 ft.

Total Depth: 470 ft.

Grouted Annulus Depth: 250 ft.

Proposed Pump Capacity 20 gpm



Use Information

Quantity Requested:	0.010 million gallons per day
Future Type of Water Use:	Municipal / Domestic
Place of Water Use:	TMK: (1) 4-2-011:004
Waimanalo Aquifer System	
Current 12-Month Moving Average Withdrawal (See Exhibit 2):	3.465 mgd

Nearby Surrounding Wells and Other Registered Ground Water Use

There are 3 other wells within a mile of the well (see Exhibit 1). Two of these wells have been sealed, and the last one is not currently in use.

Public Notice

In accordance with HAR §13-171-17, a public notice was published in the Honolulu Advertiser on October 7, 2011 and October 14, 2011 and a copy of the notice was sent to the Office of the Mayor. Copies of the completed application were sent to the Board of Water Supply, Department of Planning and Permitting, Department of Health, Department of Hawaiian Home Lands, Office of Hawaiian Affairs, the various divisions within the Department of Land and Natural Resources, and other interested parties for comments. Written comments and objections to the proposed permit were to be submitted to the Commission by October 28, 2011.

Objections

The public notice specifies that an objector meet the following requirements: (1) state property or other interest in the matter; (2) set forth questions of procedure, fact, law, or policy, to which objections are taken; (3) state all grounds for objections to the proposed permits, (4) provide a copy of the objection letter(s) to the applicant, and (5) submit objections meeting the previous requirements to the Commission by October 28, 2011.

There have been no objections to this application at the time of the preparation of this submittal.

Briefs in Support

Responses to objections, or briefs in support, regarding the application are required to be filed with the Commission ten (10) days after an objection is filed and, presumably, copies are served to the applicant. No briefs in support were filed with the Commission.

STANDARD WATER USE PERMIT CONDITIONS

1. The water described in this water use permit may only be taken from the location described and used for the reasonable beneficial use described at the location described above. Reasonable beneficial uses means "the use of water in such a quantity as is necessary for economic and efficient utilization which is both reasonable and consistent with State and County land use plans and the public interest." (HRS § 174C-3)
2. The right to use ground water is a shared use right.
3. The water use must at all times meet the requirements set forth in HRS § 174C-49(a), which means that it:
 - a. Can be accommodated with the available water source;
 - b. Is a reasonable-beneficial use as defined in HRS § 174C-3;
 - c. Will not interfere with any existing legal use of water;
 - d. Is consistent with the public interest;
 - e. Is consistent with State and County general plans and land use designations;
 - f. Is consistent with County land use plans and policies; and
 - g. Will not interfere with the rights of the Department of Hawaiian Home Lands as provided in section 221 of the Hawaiian Homes Commission Act and HRS § 174C-101(a).
4. The ground water use here must not interfere with surface or other ground water rights or reservations.
5. The ground water use here must not interfere with interim or permanent instream flow standards. If it does, then:
 - a. A separate water use permit for surface water must be obtained in the case an area is also designated as a surface water management area;
 - b. The interim or permanent instream flow standard, as applicable, must be amended.
6. The water use authorized here is subject to the requirements of the Hawaiian Homes Commission Act, as amended, if applicable.
7. The water use permit application and submittal, as amended, approved by the Commission at its December 21, 2011 meeting are incorporated into this permit by reference.
8. Any modification of the permit terms, conditions, or uses may only be made with the express written consent of the Commission.
9. This permit may be modified by the Commission and the amount of water initially granted to the permittee may be reduced if the Commission determines it is necessary to:
 - a. protect the water sources (quantity or quality);
 - b. meet other legal obligations including other correlative rights;

- c. insure adequate conservation measures;
- d. require efficiency of water uses;
- e. reserve water for future uses, provided that all legal existing uses of water as of June, 1987 shall be protected;
- f. meet legal obligations to the Department of Hawaiian Home Lands, if applicable; or
- g. carry out such other necessary and proper exercise of the State's and the Commission's police powers under law as may be required.

Prior to any reduction, the Commission shall give notice of its proposed action to the permittee and provide the permittee an opportunity to be heard.

- 10. An approved flowmeter(s) must be installed to measure monthly withdrawals and a monthly record of withdrawals, salinity, temperature, and pumping times must be kept and reported to the Commission on Water Resource Management on forms provided by the Commission on a monthly basis (attached).
- 11. This permit shall be subject to the Commission's periodic review of the **Waimanalo** Aquifer System's sustainable yield. The amount of water authorized by this permit may be reduced by the Commission if the sustainable yield of the **Waimanalo** Aquifer System, or relevant modified aquifer(s), is reduced.
- 12. A permit may be transferred, in whole or in part, from the permittee to another, if:
 - a. The conditions of use of the permit, including, but not limited to, place, quantity, and purpose of the use, remain the same; and
 - b. The Commission is informed of the transfer within ninety days.

Failure to inform the department of the transfer invalidates the transfer and constitutes a ground for revocation of the permit. A transfer which involves a change in any condition of the permit, including a change in use covered in HRS § 174C-57, is also invalid and constitutes a ground for revocation.

- 13. The use(s) authorized by law and by this permit do not constitute ownership rights.
- 14. The permittee shall request modification of the permit as necessary to comply with all applicable laws, rules, and ordinances which will affect the permittee's water use.
- 15. The permittee understands that under HRS § 174C-58(4), that partial or total nonuse, for reasons other than conservation, of the water allowed by this permit for a period of four (4) continuous years or more may result in a permanent revocation as to the amount of water not in use. The Commission and the permittee may enter into a written agreement that, for reasons satisfactory to the Commission, any period of nonuse may not apply towards the four-year period. Any period of nonuse which is caused by a declaration of water shortage pursuant to section HRS § 174C-62 shall not apply towards the four-year period of forfeiture.

16. The permittee shall prepare and submit a water shortage plan within 30 days of the issuance of this permit as required by HAR § 13-171-42(c). The permittee's water shortage plan shall identify what the permittee is willing to do should the Commission declare a water shortage in the **Waimanalo** Ground Water Management Area.
17. The water use permit shall be subject to the Commission's establishment of instream standards and policies relating to the Stream Protection and Management (SPAM) program, as well as legislative mandates to protect stream resources.
18. Special conditions in the attached cover transmittal letter are incorporated herein by reference.
19. The permittee understands that any willful violation of any of the above conditions or any provisions of HRS § 174C or HAR § 13-171 may result in the suspension or revocation of this permit.

Aquifer System Water Use Permit Index *(non-saltwater)*

ISLAND OF OAHU

WUP No	Approved	Applicant	Well No.	Well Name	WUP (mgd)	12-MAV (mgd)
WMA Aquifer System: WAIMANALO				Sustainable Yield = 10		
567	11/17/1993	STATE DHHL		RESERVATION	0.124	
675	11/20/2003	HONOLULU BWS	1942-01	WAIMANALO III	0.2	N/R
315	1/26/1994	HONOLULU BWS	1943-01	WAIMANALO WELL II	0.452	0.275 (1/07)
315	1/26/1994	HONOLULU BWS	2043-02	WAIMANALO WELL I		
674	2/21/1996	HONOLULU BWS	2044-03	WAIMANALO TUN. I	0.7	0.149 (12/06)
674	2/21/1996	HONOLULU BWS	2044-04	WAIMANALO TUN. II		
674	2/21/1996	HONOLULU BWS	2045-03	WAIMANALO TUN. III		
674	2/21/1996	HONOLULU BWS	2045-05	WAIMANALO TUN. IV		
196	10/27/1993	ROYAL HAWAIIAN CC	2045-06	ROYAL HAWAIIAN 6	0.155	N/R
196	10/27/1993	ROYAL HAWAIIAN CC	2145-01	ROYAL HAWAIIAN 1		
196	10/27/1993	ROYAL HAWAIIAN CC	2145-02	ROYAL HAWAIIAN 2		
196	10/27/1993	ROYAL HAWAIIAN CC	2145-04	ROYAL HAWAIIAN 4		
882	8/25/2010	State of Hawaii DLNR-DOFAW	2245-05	Kawainui 1	0.202	N/R
882	8/25/2010	State of Hawaii DLNR-DOFAW	2245-06	Kawainui 2		
882	8/25/2010	State of Hawaii DLNR-DOFAW	2245-07	Kawainui 3		
882	8/25/2010	State of Hawaii DLNR-DOFAW	2245-08	Kawainui 4		
882	8/25/2010	State of Hawaii DLNR-DOFAW	2245-09	Kawainui 5		
882	8/25/2010	State of Hawaii DLNR-DOFAW	2245-10	Kawainui 6		
882	8/25/2010	State of Hawaii DLNR-DOFAW	2245-11	Kawainui 7		
882	8/25/2010	State of Hawaii DLNR-DOFAW	2345-02	Kawainui 8		
882	8/25/2010	State of Hawaii DLNR-DOFAW	2345-03	Kawainui 9		
882	8/25/2010	State of Hawaii DLNR-DOFAW	2345-04	Kawainui 10		
882	8/25/2010	State of Hawaii DLNR-DOFAW	2345-05	Kawainui 11		
337	3/16/1994	C&C DWWM	2545-01	KAILUA WWTP-PC PI	0.025	N/R
Summary for 'SYSTEM' = WAIMANALO (24 detail records)						
Totalling					1.858	0.424
Available					8.142	